Saghala Tone is Foot-Driven

Some Bantu languages show tone shift or spread in a small domain of two to three syllables. (1) shows an example from Saghala (Patin 2009). Vowels with high tone (‘H’) are áccéntéd.

	a.	nɟovu	‘elephant(s)’
(1)	b. izí	nɟóvu	‘that elephant’
	c. ilya	nɟóvú	‘these elephants’

(1a) shows that in isolation, the noun [nɟovu] is all-low. In (1b), a H tone from *izi* surfaces partly on the noun, demonstrating spreading. In (1c), the H coming from *ilya* surfaces only on the noun, showing tone shift as well as spread. The difference between (1b) and (1c) is underlying tone association: word-initial /ízi/ vs. word-final /ilyá/. The generalization is: tone surfaces on the two syllables following the underlyingly H vowel.

There is ongoing debate on how to derive such bounded tonology. Pre-OT literature often used metrical structure (e.g. Sietsema 1989). However, Bickmore (1996) notes that binary feet cannot deal with trisyllabic phenomena. Furthermore, metrical tone shift is opaque, i.e. it involves intermediate forms, a problem for standard OT.

This talk proposes a new metrical account of bounded tone using recent theoretical advances. Firstly, Harmonic Serialism (‘HS’, McCarthy 2010) is adopted. Like OT, HS uses constraints, but evaluation is serial. This allows HS to deal with opacity.

Secondly, following Martínez-Paricio & Kager (forthc.), feet can be trisyllabic, combining an inner binary foot and an extra syllable. This helps deal with trisyllabic patterns.

The approach is demonstrated on Saghala tone. This is a good showcase because of its complexity; it has both shift and spread, and spans a trisyllabic domain. It also has five deviating patterns, not shown here but covered in the full analysis.

(2) shows an example derivation for an abstract, 5-syllable form.

(2)	/oóooo/	→ o(óo)oo	→ o(óó)oo	→ o(oó)oo	→ o((oó)o)o	→ o((oó)ó)o	→ [o((oó)ó)o]
	UF	*Footing*	*Spreading*	*Delinking*	*Layered Ft*	*Spreading*	*SF*

(2) correctly maps underlying second-syllable H to surface H on the next two syllables. Tone mobility is driven by feet; tone spreads to right edges, and delinks from left edges.

In conclusion, this talk accounts for bounded tone in Saghala using foot structure and Harmonic Serialism. Future work will address the typological implications of this approach, to further support the present contention that metrical structure in a HS context is sufficient to account for bounded tone phenomena.

References

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